

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

62,43

1926,

The Mendel Pear

*Originated at New Ulm, Minnesota
by WM. PFAENDER, JR.*



*History of this New Fruit; Introduction and
Endorsements by Eminent Horticulturists;
Tests that have proven the Mendel
Hardy and Blight-Proof.*

By CARL PFAENDER

Youngest son of the late Horticulturist and Nurseryman

1852

WM. PFAENDER, JR.

1924

The History of the Mendel Pear

A case of "Natural selection and survival of the fittest."

In the fall of 1903, Wm. Pfaender Jr. bought a bushel of pears and told his children to eat to their heart's (or stomach's) content, but to save all the cores for him. He did not want much for himself. However, he wanted the cores for a good reason—the seeds.

I often wonder as I eat fruits what a wonderful assortment of new varieties we would have if all of the seeds we throw away were to be saved and planted. No doubt in the past, many thousands of the finest variety producing seeds have been destroyed. Of course it is an impossibility to save all seeds of fruits and we would soon have to transplant new varieties to other planets by means of shooting sky-rockets loaded with plants, if all seeds were saved and planted. Yet—if one of us children had swallowed or lost one of the seeds from the bushel of pears which father brought home, the Mendel pear might never have been—for is it not possible that just that seed might have been the one from which the Mendel originated?

In the lot of seeds obtained from the bushel of pears were several hundred seeds and yet only one of these seeds proved to be of any value. This produced the Mendel Pear and was clearly a case of "the survival of the fittest." This to my notion seems to place the Mendel Pear correctly—the survival of the fittest—for it alone, from a batch of seventy seedlings that father obtained from that lot of seeds, survived the battle with the elements. It survived the coldest winters in the last twenty-three years. It was spared by rodents when its partners were killed, insects did not get it, nor disease and best of all—it was immune to the dread fire-blight disease.



Wm. Pfaender Jr. standing near a heavily laden Mendel branch.

Here is the history in a few words as written by father, the originator, written in 1923 and the tree was then twenty years old.

"Twenty years ago, I planted a lot of seeds of Winter Nellis and Duchess de Angouleme pears. From this planting I secured seventy seedlings. These were replanted for the purpose of growing them to fruiting age. Every season some were lost, some were killed by rabbits, others by not being hardy enough; but most of them were killed by blight. Finally there were but three trees that survived and one of these, that I have named Mendel, had the first fruit six years ago. The other two and a number of named varieties of pears, standing next to the Mendel were killed by blight, since the first fruiting of the Mendel. The fruits of the Mendel are fully as large as that of the Bartlett pear. Fruit hangs well to the tree, is of excellent quality, sweet and juicy and keeps well into November." He adds a postscript a little later—"The original tree had 133 fruits on it this season in spite of the fact that we had to cut it back severely for the purpose of getting scions for propagation."

The Mendel is a case of "Natural Selection." The originator of the Mendel was not an originator in the same sense of the words as men like Dr. Hansen and Luther Burbank and others who create new varieties. The difference is that Dr. Hansen produces new varieties mostly by the method of cross-pollination, carefully selecting the fruits which constitute the parents of the new offspring and in that way he can to a certain extent foretell the characteristics or the good features of his creation. Father did not have a hand in the cross-pollination that took place in the orchard from whence the seed came that produced the Mendel. He planted the seeds and watched and waited for results, taking a chance on caring for a lot of trees in the hope that one of them might produce a fruit worth while the work he put on them.

Nature was the selector of the one that proved worth while. Nature's forces killed one by one and finally left only three trees at the time the first one (the Mendel) bore. Then as if to say "that is a good one—take it and multiply it—wait no longer for results," nature again took a hand and killed the remaining two trees and left only "THE MENDEL". What the fruit of the other two might have been, nobody knows. The foliage looked good, large glossy leaves and vigorous trees. The fruit might have been of extra quality but the trees lacked the one great quality that pear growers have been looking for, for hundreds of years—resistance to blight.

The many years of watchful waiting and care were repaid after father saw the first fruits of his tree. Tho he had been burdened with many business problems in his life he still took time to nurse along these pear



The original Mendel tree on the Grounds of the Pioneer Nursery Co.

trees for fourteen years before he saw results. There is much in the Horticultural side of life that makes for romance and adventure. Nothing is more mysterious than the creating of new varieties and watching patiently for the traits of the offspring to appear. Years of patient waiting and watching are devoted to the work. Often the blood of poor ancestry shows up in new creations and sometimes something so entirely new appears that one wonders just where its influence came from. But if we could trace back we would find the reason somewhere, in maybe a far off land.

The Mendel Pear for instance. We do not know just what seed produced this, whether it was from the Winter Nellis or Duchess de Angouleme which were in the bushel of fruit which father bought that year. Neither of these varieties is very hardy and neither is blight-proof to any extent.

In far off China in the wild part of Manchuria are native pear forests which bear small edible fruit. These pears have been proven practically blight-proof by eminent botanists and horticulturists as Prof. Reimer of Talent, Oregon and Prof. Hansen of Brookings, South Dakota.

These men and their helpers have braved danger and hardships in order to bring hardy fruit stocks to America. Many lives have been lost in past years in the search of bringing us new fruits and ornamental plants to gladden our hearts and appease the ever new wants of our appetites.

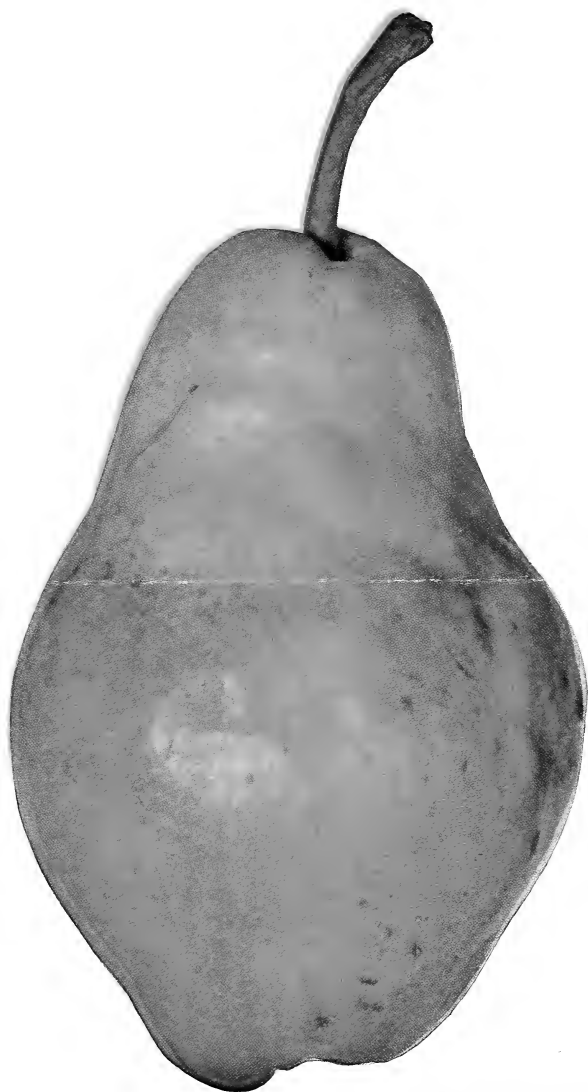
Coming back to the Mendel Pear. It is not unlikely that this tree may have some blood of a Chinese ancestor in it. It may be that in the orchard where the fruit came from, a Chinese pear tree was growing, as trees of this variety had been introduced to experimenters as early as 1880. Pollen was carried from this tree by the insects or wind to the other varieties and it just happened that the one seed out of maybe millions that came from that same orchard from which the pears came that father bought, had the blight resistant blood characteristics in it coupled with the best characteristics of the delicious pears.

What it is that makes the tree immune to blight can only be explained by scientists. It is on the same order as a man who is immune to a contagious disease because of the make-up of his blood. This blight resistant sap flows in certain varieties of the Chinese pears and also in the Mendel.

With the introduction of the Mendel pear, we can hope for extensive pear orchards in the northern as well as southern states as it is as hardy as it is blight-proof. The Mendel has withstood 45 degrees below zero and survives in the cold parts of Southern Canada.

Fire-blight is the greatest menace to pear orchards everywhere. In the southern states where the finest varieties are hardy enough, pear orchards are not profitable because of this dread disease which wipes out orchards almost like fire, in a short time. There is no cure for blight, only a control, cutting out the affected portions of blight or destroying the whole tree will often save the other trees, but as blight is carried by insects from one tree to another, a neighboring orchard may be the cause of affecting the others.

The Mendel has been proven blight-proof beyond doubt. The first test was when the original tree stood among all the other varieties which blighted to death. Then, young trees were inoculated with the bacteria and produced no disease. At present we have at our nursery a young Mendel tree standing in a row with test pears which we obtained from different government stations. The trees stand close enough to rub branches with the Mendel and even rubbed so hard that wounds were caused on the Mendel twigs. Both of the neighbor-



THE MENDEL PEAR. The hardest pear of quality, produced. Blight-proof and disease-free, heavy bearing, sweet and juicy. Originated by the late Wm. Pfaender, Jr., founder of the Pioneer Nursery Co. The Mendel makes possible, profitable commercial pear orchards in the Great Northwest.

ing trees are badly diseased with blight and the blighted twigs rubbed wounds into the tender young Mendel twigs, yet produced no sign of blight. No test could be better.

This last summer, 1925, a full grown tree of another variety of pear blighted to death within a few days, only twenty feet distant from the original Mendel tree. President Simmons of the South Dakota State Horticultural Society stated that he has a Mendel Pear growing in his garden for the last three years and it has made better growth than any other fruit tree he has had. He grafted some other varieties of pears on some of the branches of the Mendel for a test. After union had taken place and the grafts growing nicely, blight attacked the grafted portions and killed the grafts down to where they were joined on the Mendel—and the Mendel stayed sound and healthy. Where could one find a more “acid” test? There is a difference between Mendel Pear wood and other wood as between wood and iron. Wood succumbs to fire and iron will not.

State Entomologist, A. G. Ruggles of Minnesota, is highly enthused about his tree of the Mendel. He had a Duchess tree blight to death right next to the Mendel Pear and it did not affect the Mendel. Mr. J. D. Winter, Deputy State Inspector of Minnesota, also recommends the Mendel highly. He has taken several pictures of the original tree and young trees showing their vigorous growth and also the Mendel tree next to the blighting tree.

For the Pacific Coast Nurseries, Prof. Reimer is the authority. They will not accept anything in the pear line as being blight-proof until Prof. Reimer of the Oregon Agricultural Experiment Station has given it the “acid” test. In 1923 we forwarded a few small Mendel trees to Prof. Reimer. When these had made some new growth he inoculated some of the tender wood with blight and succeeded to slightly infect the wounded portion of the wood. Prof. Reimer takes the bacteria and inoculates this into the sap of the tree just as a doctor would inoculate a person with an anti-toxin; only the doctor does it to prevent disease, while Prof. Reimer tries to infect the tree.

Other pear trees that are given this test readily blighted and are killed in short order. We feel confident that if any blight germs infect a portion of the Mendel pear wood, the blight will soon be overcome by the resistive quality of the sap of the Mendel. We have failed to cause any infection in our trees even where we cut away a good portion of the wood to make a large wound and gave blight germs every opportunity to get a start. This peculiar constituent of the sap seems to attack the blight bacteria and kill it in short order. We feel safe in saying that the Mendel is *the only hardy blight-proof pear of quality in the world.*

The quality of the fruit is of high merit. It is as large and larger than the Bartlett. It is sweet and juicy, and free from grit. The color is a golden yellow when fully ripe. The fruit was sampled by Professors Dorsey, Brierly and Alderman and by Mr. Chas. Haaralson, until of late superintendent of the Minnesota Fruit Breeding Farm, and Mr. Redpath, the superintendent of the Fruit Exhibit at the Minnesota State Horticultural Society, meeting in 1920 at Minneapolis, Minnesota and pronounced by them to be of A-No. 1 quality in every respect.

The blossoms are self-pollenizing, and the fruit hangs well to the tree. We have had more fruit from this tree than from all other pear trees planted in the last twenty years (and we have had several hundred of them.) The fruit keeps until the end of December.

What Eminent Horticulturists Say

Following are statements of some of the eminent authorities of Horticulture, regarding the Mendel.

Prof. M. J. Dorsey, while in charge of Fruit Breeding at the University of Minnesota wrote: "I am interested in your Mendel Pear and personally I have no hesitation in recommending it from what I saw of it at the Horticultural Society Meeting last year. I have no objection in being quoted in connection with a pear which seems so promising as this. I want a tree of it as soon as you have one available."

J. M. DORSEY.

In charge of the Section of Fruit Breeding at the University of Minnesota.

Mr. C. N. Ruedlinger of the Cedar Hill Nursery, St. Louis Park, Minnesota, writes: "I received the pears yesterday and wish to thank you for same. They are very fine pears and we surely enjoyed them."

Very truly yours,

C. N. RUEDLINGER.

Mr. Frane P. Daniels, proprietor of The Daniels Nursery: "Allow me to thank you most kindly for the specimen of the Mendel Pear you mailed me a few days ago. I have put it away as you suggested and will sample it as soon as its condition is right for eating. It is certainly a pleasure to be able to look forward to fruit of this sort in our own orchard and in the orchards around the state, and you are to be congratulated for having originated it."

Yours very truly, FRANC P. DANIELS.

Plant Pathologist, B. T. Galloway, of the U. S. Dept. of Agriculture.

My Dear Mr. Pfaender. I want to acknowledge your kind note of November 5th; also the sample of Mendel Pear which you sent us. The pears were a little soft when they reached us, having probably ripened in transit. Despite their softness and their over-ripeness, we found the fruit of excellent quality, juicy, sweet and melting; altogether we should say, a good pear. I think this pear will be watched with interest, especially if it is blight-proof and cold resistant.

Yours very truly, B. T. GALLOWAY.

Mr. Carl Pfaender, Secretary-Treasurer,
Pioneer Nursery Company,
New Ulm, Minnesota.
Dear Sir:

I have your letter asking for my opinion of the Mendel Pear. I consider the Mendel Pear very promising for Minnesota and other states where hardiness is essential. It is apparently very resistant to blight as I have seen the Mendel growing free from blight with branches touching blighted seedling pear trees. In fact I have never seen the Mendel affected with blight. The tree seems very hardy and should be a welcome addition to our fruits for the Northwest.

You may use this letter in any way you wish.

Very truly yours, A. G. RUGGLES,
State Entomologist.

St. Paul, Minnesota,
July 29, 1925.

Pioneer Nursery Co., New Ulm, Minnesota.

Dear Sirs: The Mendel pear that I bought of you a few years ago are doing fine. I set them in a new orchard with several varieties of apple. This year the apple trees around them are covered with fire-blight while the Mendel have no blight.

I would like to propagate for selling and as you mentioned taking off the restrictions I will bud some if you have no objections.

Please let me know by return mail.

Yours very truly,
J. W. BAILEY.

We could fill a book with letters of this sort and different tests and proofs of the quality and blight resistance and hardiness of this pear. The pear is now being tried in many of the university farms of the different states and it has caused comment all over the country and in Canada, among horticulturists. Prof. N. E. Hansen of the Brookings, South Dakota State College, wishes to obtain pollen of the Mendel Pear and to cross it with some other varieties in order to further the work of creating blight-resistant pears. Prof. Hansen has made many trips to the Orient in order to hunt for the hardest pear stocks and other plants and has created many wonderful new fruits in past years. We believe though that so far no one has created a pear equal to the Mendel in hardiness, blight resistance and general quality of the fruit. It will no doubt be years before a better pear will be introduced but we will welcome this new fruit, as our Mendel Pear is welcomed now. We are always glad to hear of new varieties of fruit and we welcome any of the plant breeders and experimenters to gather pollen from this tree.

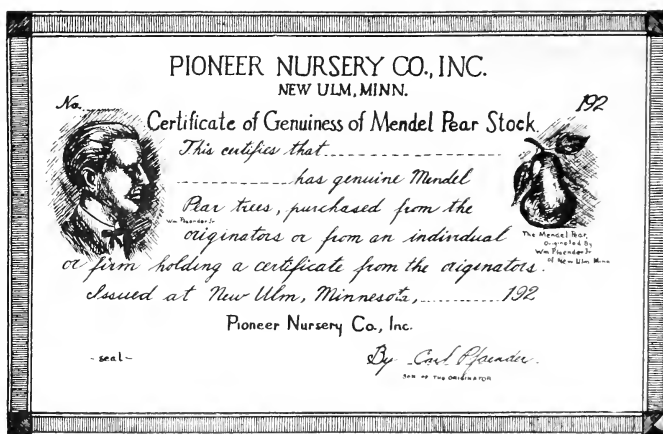
The originator, Wm. Pfaender Jr. had the joy of knowing that he had helped create a new fruit of merit and that his fellow-horticulturists and nurserymen appreciated his work, before he passed into the Great Beyond, May 28, 1924. His origination is the finest monument to his memory. Although he never had financial success he had success in planting up in twenty years, a barren hill into a garden with a collection of all the hardest fruit trees, ornamental trees, shrubs and flowers, and in creating a new fruit which has the quality that men have been seeking in pears—blight-resistance and hardiness.

Through his work, orchardists and horticulturists will benefit. It will not be long before extensive pear orchards will be seen all over the great North-west and northern states in general. In order to protect people from buying a substitute under the Mendel label we have adopted a certificate plan. You will find the certificate on the last page of the booklet. Every nurseryman having genuine Mendel Pears for sale will have this certificate.

Although we may have reaped great profit by holding the Mendel tree for our own propagation only, we realize that more people will be served by allowing other nurseries to propagate it. We have not been able to supply the great demand for the Mendel and up to now have advertised it very little on that account. Several hundred thousand trees must be supplied to the people who have heard about it and we cannot supply all of them. Therefore we have allowed other nurseries to propagate it and in that way more people will have their orders supplied.

Do not buy Mendel Pears from a salesman of any nursery unless he can show you the Mendel Certificate. Be sure that the name contained in the certificate is the name of the firm he is selling for. Do not buy Mendel Pears through catalog unless the firm has the certificate printed in the catalog.

The Pioneer Nursery, of course, was founded by the originator of the Mendel and you will find our stock true to name as we have the original tree and all other nurseries get their stock from us or from a firm who have received stock from us. We will identify twigs and leaves of pear trees supposed to be Mendel pears if mailed to us, at any time.



The certificate which prevents substitution and assures the buyer genuine stock.

We Invite Criticism

Whenever something good is produced there will be many who try to work against it. They watch for a chance to disprove the claim made for the new production. We have heard, however, very little criticism against the Mendel. We had a report that the Mendel froze back in one place. We investigated and found that on account of a moist fall the young tree had made heavy growth late in the year and the wood had not quite ripened. Naturally, when the thermometer registered 45 degrees below zero that winter, the tips of the tender wood suffered a little. (The sturdy oak would suffer in a case like that). This, however, happens rarely. We have reports from Canada that prove the Mendel hardy. Our own trees have gone thru a 45 degree below zero temperature without harm.

Trees that die on account of poor planting, or from insects or rodents, cannot be taken as a criticism against a variety.

Whenever someone talks of a Mendel blighting or freezing out, tell us: we want to know. But, when you tell us, we also want to know the name of the owner of the tree and from whom the tree was purchased. Nine times out of ten, it will be no Mendel; or else, on the tenth count the tree never blighted.

We have sold thousands of trees of the Mendel and have had no complaints. That is our best recommendation, as are also the many letters of praise.

The Pioneer Nursery Company, Inc.

(Founded by Wm. Pfaender, Jr. in 1900)

is the owner of the Original Mendel Pear Tree

Pioneer Nursery Company

(Incorporated)

New Ulm, Minnesota

Campbell Printing Company, Des Moines, Iowa